

**Montana Board of Oil and Gas Conservation
Environmental Assessment**

Operator: KeeSun Corporation
Well Name/Number: State 11A-16
Location: NE SW Section 16 T36N R03W
County: Toole MT; Field (or Wildcat) Wildcat

Air Quality

(possible concerns)

Long drilling time: No, 3 to 4 days drilling time.

Unusually deep drilling (high horsepower rig): No, small single derrick drilling rig, about 500 HP (Estimated) to drill to 1900' TD, Jurassic Swift Formation test.

Possible H₂S gas production: No H₂S anticipated.

In/near Class I air quality area: No not in a Class I air quality area.

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:

☒ Air quality permit (AQB review)

☐ Gas plants/pipelines available for sour gas

☐ Special equipment/procedures requirements

☐ Other: _____

Comments: No special concerns – using small rig to drill to 1900' TD. If there aren't any gas gathering system nearby, associated gas can be flared under Board Rule 36.22.1220.

Water Quality

(possible concerns)

Salt/oil based mud: No, freshwater, freshwater mud system, air, air mist.

High water table: No high water table anticipated.

Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral drainage, about 1/32 of a mile to the east from this location.

Water well contamination: No, water wells within a 1 mile radius around this location.

Surface hole in this well will be drilled to 200' with freshwater and/or air. Steel surface casing will be run and cemented to surface to protect ground water. (Rule 36.22.1001)

Porous/permeable soils: No, sandy silty bentonitic soils.

Class I stream drainage: No Class I stream drainages.

Mitigation:

☐ Lined reserve pit

☒ Adequate surface casing

☐ Berms/dykes, re-routed drainage

☐ Closed mud system

☐ Off-site disposal of solids/liquids (in approved facility)

☐ Other: _____

Comments: 200' of surface casing cemented to surface adequate to protect freshwater zones (Rule 36.22.1001) Also, air/air mist and/or fresh water mud systems to be used.

Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: No, stream crossings anticipated.

High erosion potential: No, small cut, up to 1.1' and small fill, up to 0.3', required.

Loss of soil productivity: No, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite: No, 200'X200' location size required.

Damage to improvements: Slight, surface use is a grassland.

Conflict with existing land use/values: Slight

Mitigation

☐ Avoid improvements (topographic tolerance)

☐ Exception location requested

☒ Stockpile topsoil

☐ Stream Crossing Permit (other agency review)

☒ Reclaim unused part of wellsite if productive

☐ Special construction methods to enhance reclamation

☐ Other _____

Comments: Access will be over existing county gravel road, Kevin North Road and existing two track trail/lease road. About 800' of access will be built off the existing two track trail/lease road into this location. Cuttings will be buried in and unlined earthen pit. Drilling fluids if used will be allowed to dry in the pit. Pits will be backfilled after drying. No special concerns.

Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: No residence within a 1 mile radius around this location. The town of Sunburst, Montana is about 4 miles to the east and the town of Kevin, Montana is about 10 miles to the south southeast from this location.

Possibility of H2S: No H2S anticipated.

Size of rig/length of drilling time: Small drilling rig/short 3 to 4 days drilling time.

Mitigation:

☒ Proper BOP equipment

☐ Topographic sound barriers

☐ H2S contingency and/or evacuation plan

☐ Special equipment/procedures requirements

☐ Other: _____

Comments: Adequate surface casing and operational BOP (3,000 psi annular) should mitigate any problems. (BOP's 3,000 psig annular) Rule 36.22.1014. No concerns

Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: None identified.

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species: Only species identified as threatened or endangered is the Black-footed Ferret. Candidate species listed is the Sprague's Pipit.

Proposed species is the Mountain Plover. NH tracker website lists only seven (7)

species of concern as the Hoary Bat, Golden Eagle, Burrowing Owl, Ferruginous Hawk, Chestnut-collared Longspur, McCown's Longspur and Brewer's Sparrow.

Mitigation:

☐ Avoidance (topographic tolerance/exception)

☒ **Other agency review** (DFWP, federal agencies, **DNRC Trust Lands**)

☐ Screening/fencing of pits, drillsite

☐ Other: _____

Comments: Private surface CRP land. No concerns

Historical/Cultural/Paleontological

(possible concerns)

Proximity to known sites: None identified

Mitigation

☐ avoidance (topographic tolerance, location exception)

☒ **Other agency review** (SHPO, **DNRC Trust Lands** L, federal agencies)

☐ Other: _____

Comments: DNRC Trust Lands surface grazing lands. No concerns.

Social/Economic

(possible concerns)

☐ Substantial effect on tax base

☐ Create demand for new governmental services

☐ Population increase or relocation

Comments: No concerns.

Remarks or Special Concerns for this site

Well is a wildcat, 1900' Jurassic Swift Formation test.

Summary: Evaluation of Impacts and Cumulative effects

No long term impacts expected. Some short term impacts will occur, but can be mitigated.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): /s/ Steven Sasaki _____

(title:) Chief Field Inspector

Date: June 13, 2013

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website

(Name and Agency)

Toole County water wells.

(subject discussed)

June 13, 2013

(date)

US Fish and Wildlife, Region 6 website

(Name and Agency)

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES

MONTANA COUNTIES, Toole County

(subject discussed)

June 13, 2013

(date)

Montana Natural Heritage Program Website (FWP)

(Name and Agency)

Heritage State Rank= S1, S2, S3, T36N R3W

(subject discussed)

June 13, 2013

(date)

Montana Cadastral Website

(Name and Agency)

Surface Ownership and surface use Section 16 T36N R3W

(subject discussed)

June 13, 2013

(date)

If location was inspected before permit approval:

Inspection date: _____

Inspector: _____

Others present during inspection: _____